contacting the antibody reactive with Apo C-III with the biological sample to form

complexes between the antibody and the Apo C-III containing lipoprotein particles,

contacting the Pan B antibody with the biological sample,

separating the complexed antibody-lipoprotein particles from the biological sample,

and

determining the amount of Apo C-III associated with Apo B, which is the amount of

Apo C-III present in VLDL in the sample; and

determining the amount of Apo C-III present in the HDL in the sample by

providing Apo A-I monoclonal antibody immunoreactive specifically with Apo A-I

[having a binding affinity and specificity similar to AIbD₅ and AIbE₂],

providing monoclonal antibody immunoreactive with Apo C-III [having binding

affinity and specificity similar to XbA₃],

contacting the antibody reactive with Apo C-III with the biological sample to form

complexes between the antibody and the Apo C-III containing lipoprotein particles,

contacting the anti-Apo A-I antibody with the biological sample,

separating the complexed antibody-lipoprotein particles from the biological sample,

determining the amount of Apo C-III associated with Apo A-I, which is the amount of

Apo C-III present in HDL in the sample, and

determining the ratio of Apo C-III present in VLDL in the sample and Apo C-III

present in HDL in the sample which is the ratio of VLDL to HDL.

16. (twice amended) A method for determining the relative ratio of VLDL to HDL comprising

determining the amount of Apo E present in the VLDL in the sample by

providing Pan B antibody which is characterized by an equal binding and high affinity for all Apo B-containing lipoproteins in human plasma,

providing monoclonal antibody [immunoreactive with Apo E having binding affinity and specificity similar to EfB₁] which binds to Apo E associated predominantly with VLDL,

contacting the antibodies reactive with Apo E associated with VLDL with the biological sample to form complexes between the antibodies and Apo E containing particles,
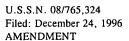
separating the complexed antibody-ApoE containing particles from the biological sample,

contacting Pan B antibody with the biological sample, and

determining the amount of Apo E associated with Apo B which is the Apo E present predominantly in VLDL in the sample;

and

determining the amount of Apo E present in the HDL in the sample by

providing Apo A-I monoclonal antibody immunoreactive specifically with Apo A-I [having a binding affinity and specificity similar to AIbD₅],

providing monoclonal antibody [immunoreactive with Apo E having binding affinity and specificity similar to EfD₃,] which binds to Apo E predominantly associated with HDL,

contacting the antibodies reactive with Apo E to the biological sample to form

complexes between the antibodies and Apo E containing particles,

separating the complexed antibody-ApoE containing particles from the biological

sample,

contacting Pan B antibody with the biological sample,

determining the amount of Apo E associated with Apo A-I, which is the amount of

Apo E present in HDL in the sample, and

determining the ratio of Apo E present in VLDL in the sample and Apo E present in

HDL in the sample which is the ratio of VLDL to HDL.

17.   (twice amended) A method for determining the relative ratio of LPA-I and

LPA-I:A-II lipoprotein particles in a biological sample comprising

providing anti-Apo A-I monoclonal antibody immunoreactive specifically with Apo A-

I [having a binding affinity and specificity similar to AIbD$_5$],

providing anti-Apo A-II monoclonal antibody immunoreactive specifically with Apo

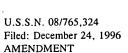A-II [having a binding affinity and specificity similar to CdB$_5$];

contacting the anti-Apo A-I antibody [having a binding affinity and specificity similar

to AIbE$_2$] with the sample to form complexes with both LPA-I and LPA-I:A-II

and determining the quantity of Apo A-I associated with both LPA-I and LPA-I:A-II

lipoprotein particles; and

~~contacting the anti-Apo A-II antibody with the biological~~ sample to form complexes

with LPA-I:A-II and determining ~~the quantity of Apo A-II associated with the LPA-I:A-II.~~

~~18. (twice amended) A composition for determining the concentration of a~~

lipoprotein, apolipoprotein, or lipid associated with a specific lipoprotein in a biological

sample comprising:

antibody molecules specifically immunoreactive with a specific lipoprotein or

apolipoprotein, wherein the antibody molecules are selected from the group consisting of

monoclonal antibodies, recombinant antibodies, and monoclonal antibody fragments that

specifically bind to a stable, conformation independent epitope which is uninfluenced by the

lipid content of the lipoprotein, apolipoprotein, or lipid associated with a specific lipoprotein.

~~23. (twice amended) The composition of claim 18 further comprising a second~~

monoclonal antibody immunoreactive with a second distinct epitope of the lipoprotein or

apolipoprotein which is immunoreactive with the first antibody.

28. (twice amended) The composition of claim 18 for determining the relative

ratio of VLDL to HDL further comprising

Pan B antibody which is characterized by an equal binding and high affinity for all

Apo B-containing lipoproteins in human plasma,

monoclonal antibody specifically immunoreactive with Apo C-III [having binding

affinity and specificity similar to XbA₃], and

monoclonal Apo A-I antibody immunoreactive specifically with Apo A-I [having a binding affinity and specificity similar to AIbD$_5$ and AIbE$_2$].

29.   (twice amended) The composition of claim 18 for determining the relative ratio of VLDL to HDL further comprising

Pan B antibody which is characterized by an equal binding and high affinity for all Apo B-containing lipoproteins in human plasma,

monoclonal antibody [immunoreactive with Apo E having binding affinity and specificity similar to EfB$_1$] which predominantly binds to Apo E associated with VLDL ,

monoclonal Apo A-I antibody immunoreactive specifically with Apo A-I [having a binding affinity and specificity similar to AIbD$_5$], and

monoclonal antibody [immunoreactive with Apo E having binding affinity and specificity similar to EfD$_3$] which predominantly binds to Apo E in HDL.

30.   (twice amended) The composition of claim 18 for determining the relative ratio of LPA-I and LPA-II lipoprotein particles comprising

monoclonal Apo-A-I antibody which binds Apo A-I lipoproteins in human plasma [having a binding affinity and specificity with Apo AIbD$_5$]; and

monoclonal Apo A-II antibody immunoreactive specifically with Apo A-II [having a binding affinity and specificity similar to CdB$_5$].

42.   (amended) A method for determining the relative ratio of LDL to HDL in a biological sample comprising

adding to the sample monoclonal antibody molecules immunoreactive with low density

lipoprotein and not cross-reactive with high density lipoprotein and determining the amount

of low density lipoprotein;

adding to the sample monoclonal antibody molecules immunoreactive with high

density lipoprotein and not cross-reactive with low density lipoprotein and determining the

amount of high density lipoprotein; and

determining the ratio of the amount of low density lipoprotein with the amount of

high density lipoprotein.

45.   (amended) A method for determining the relative ratio of first and second

lipoproteins in a biological sample, comprising:

determining the amount of first lipoprotein in the sample by

contacting a first monoclonal antibody immunoreactive with a first

apolipoprotein on the first lipoprotein with the sample to form complexes between the first

antibody and the first apolipoprotein,

contacting a second monoclonal antibody immunoreactive with a second

apolipoprotein on the first lipoprotein with the sample to form complexes between the second

antibody and the first antibody:first lipoprotein complexes,

determining the amount of second apolipoprotein associated with the first

apolipoprotein, which is the amount of second apolipoprotein associated with the first

lipoprotein;

determining the amount of second lipoprotein in the sample by

contacting a third monoclonal antibody immunoreactive with a third

apolipoprotein on the second lipoprotein with the sample to form complexes between the

third antibody and the third apolipoprotein,

contacting a fourth monoclonal antibody immunoreactive with a fourth

apolipoprotein on the second lipoprotein with the sample to form complexes between the

fourth antibody and the fourth antibody:second lipoprotein complexes,

determining the amount of fourth apolipoprotein associated with the third

apolipoprotein, which is the amount of fourth apolipoprotein associated with the second

lipoprotein; and

determining the ratio of first and third apolipoproteins which is the ratio of first and

second lipoproteins.

46.   (amended) The method of claim [43] 45, wherein the first apolipoprotein is

the same as the third apolipoprotein and at least one of the second or fourth apolipoprotein is

specific for the first or second lipoprotein, respectively.

47.   (amended) The method of claim [43] 45, wherein the first antibody is the

same as the third antibody.